



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION IV

345 COURTLAND STREET, N.E.
ATLANTA, GEORGIA 30365

May 2, 1991

4WD-RCRA&FFB

CERTIFIED MAIL

RETURN RECEIPT REQUESTED

Robert N. Dunlap, Plant Engineer
American Standard, Inc.
P.O. Box 1050
Louisville, Kentucky 40201

RE: RCRA Facility Assessment Report (RFA)
American Standard, Inc., Louisville, Kentucky
EPA I.D. No. KYD 006 375 489

Dear Mr. Dunlap:

The U.S. Environmental Protection Agency (EPA) and the Kentucky Department for Environmental Protection (KYDEP) have completed their reviews of the information collected during the RCRA Facility Assessment (RFA) process for your facility. The purpose of an RFA is to identify all Solid Waste Management Units (SWMUs) at a given facility, assess each as to its potential for past or continuing release of hazardous waste or hazardous constituents to any environmental media, and determine an appropriate course of action. Enclosed is a copy of the final RFA report and a summary of our RFA findings.


The information available at the time that the RFA at your facility was performed resulted in the identification of fifteen (15) SWMUs. Eleven (11) of these units have a low potential for release and, therefore, require no further investigation at this time. Confirmatory sampling is required at the remaining four (4) units to determine if hazardous constituents have been released in these areas. The results of the required sampling and analysis will determine the need for further investigation via a RCRA Facility Investigation (RFI). RFI's are imposed through either a Hazardous and Solid Waste Amendments (HSWA) permit or an administrative order.

If you should have any questions or additional information that may affect the findings of the RFA, please contact Alicia Thomas of EPA at (404) 347-3433 and Mohammad Alauddin of KYDEP at (502) 564-6716 within forty-five (45) days of receipt of this letter.

Sincerely yours,



James H. Scarbrough, P.E., Chief
RCRA and Federal Facilities Branch
Waste Management Division



Susan Bush, Director
Division of Waste Management
Kentucky Department for
Environmental Protection

Enclosures: 1) Final RCRA Facility Assessment (RFA) Report
2) RFA Recommendation Summary

Recommendation Summary
RCRA Facility Assessment (RFA) Report

American Standard, Incorporated
Louisville, Kentucky
EPA I.D. No. KYD 006 375 489

SWMU No.	Description	Recommendation
1	Trash Dumpster	No further investigation required at this time
2	Trash Compactor & Dumpster	No further investigation required at this time
3	Sand and Slag Pile	No further investigation required at this time
4	Loading Area Under Cupola Baghouse	No further investigation required at this time
5	Site of Trash Dumpster	No further investigation required at this time. Remove debris as indicated in RFA report
6	Temporary Waste Staging Area	No further investigation required at this time
7	Temporary Waste Staging Area	No further investigation required at this time
8	Former Waste Staging Building	Sampling and clean-up of area as indicated in RFA report
9	Former Dump Trailer Site	No further investigation required at this time
10	Former Container Storage Area	Confirmatory Sampling required to determine if releases of hazardous wastes have occurred
11	Inactive Landfill	Confirmatory Sampling required as indicated in the RFA report to determine if releases of hazardous wastes have occurred
12	Trash Dumpster	No further investigation required at this time

Recommendation Summary
RCRA Facility Assessment (RFA) Report
(continued)

American Standard, Incorporated
Louisville, Kentucky
EPA I.D. No. KYD 006 375 489

<u>SWMU No.</u>	<u>Description</u>	<u>Recommendation</u>
13	Site of Former Roll-Off Box	No further investigation required at this time
14	Basecoat Tank and Dike	Sampling and clean-up of area as indicated in RFA report
15	Container Storage Area	No further investigation required at this time

EPA
COPY #3

RCRA FACILITY ASSESSMENT REPORT FOR
AMERICAN STANDARD INC.
1541 South Seventh St.
Louisville, Jefferson County, Kentucky
EPA ID# KYD-006-375-489

May, 1991

Prepared by the Kentucky Division of Waste Management
Hazardous Waste Branch
Geoffrey Young

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EXECUTIVE SUMMARY

The American Standard, Inc. facility is located in Louisville, Jefferson County, Kentucky. The plant manufactures sanitary ware consisting of bathtubs, sinks, and urinals.

The facility is a large-quantity generator of hazardous wastes, consisting mainly of lead-containing powders and dusts (EPA waste code D008).

The Visual Site Inspection (VSI) identified 15 Solid Waste Management Units (SWMUs). These SWMUs consisted of three trash dumpsters, three sites where dumpsters or roll-off boxes were previously stored, one waste pile, the loading area under the cupola baghouse, two waste staging areas, a former waste storage building, a former container storage area, an inactive landfill, an inactive hazardous waste tank, and a container storage area.

No further action is recommended for ten of the SWMUs. At one trash dumpster site, cleanup of debris is recommended. Testing and analysis for hazardous constituents are recommended for the following SWMUs: the former waste storage building, the former container storage area, the inactive landfill, and the inactive hazardous waste tank. The testing could appropriately be conducted in a RCRA Facility Investigation (RFI).

1.0 INTRODUCTION

1.1 Objective

The Kentucky Division of Waste Management conducted a preliminary review (PR) and visual site inspection (VSI) of the American Standard facility during the period June - August 1990. The VSI took place on August 29.

The major objective of the RCRA Facility Assessment, or RFA, was to conduct an off-site and on-site assessment of the entire facility, in order to characterize the solid waste management units (SWMUs), associated releases of hazardous constituents to the environment, and any other areas of concern (AOCs).

1.2 Scope of Work

The scope of this assessment included the following activities:

- A search of files to help characterize the facility.
- Review of information submitted by American Standard on August 3, 1990 describing the SWMUs at the facility.
- Inspection and photographic documentation of all AOCs and SWMUs, including associated releases and exposure pathways.

Information about the facility, where not otherwise referenced, was obtained from the RCRA facility files located at the Division of Waste Management, 18 Reilly Road, Ash Building Annex, Frankfort, Kentucky.

2.0 ENVIRONMENTAL SETTING

2.1 Water Supply

The Louisville Water Company serves the city of Louisville, most of Jefferson County and several surrounding counties.

The Louisville Water Company relies exclusively on two surface water intakes on the Ohio River for potable water supplies. One intake is located at river mile 600.6 (Zoin Avenue). The second intake is located above Herrods Creek at Mayfair Avenue and Jacobs School Road (river mile 596). Both intakes are located upriver from the facility. The surface water supplies serve approximately 700,000 people. The Louisville Water Company also sells water to other systems including the Jeffersontown Water and Sewer Commission.

Groundwater is not used for municipal water supplies in the Louisville area and is only lightly utilized for private purposes. There are an estimated 700 private wells in Jefferson County that obtain potable supplies at well depths from 75 to 100 feet. Most private wells are located on the perimeter of Jefferson County and few would be located in the city of Louisville (Ref. 4). No private wells were identified within the study area.

2.2 Surface Water

The topography of the site is essentially level, with minor local rises and shallow depressions, many of which are artifacts of human activities such as grading. In the inactive landfill area at the southeastern corner of the property, there were signs of surface water flow as indicated by dotted lines on the facility plot plan, Figure 1. Most of the site is paved or under roof, and drains into the Municipal Sewer District (MSD) system. The major exception is the triangular unpaved area at the southeast corner of the property.

2.3 Climatological, Meteorological, and Hydrogeological Factors

Jefferson County lies within both the Ohio River Valley and the Bluegrass regions of north-central Kentucky on the western flank of the Cincinnati Arch within the Central Lowlands Physiographic Province. The precipitation for this area is approximately 44 inches per year (Ref. 6). The majority of the county is drained by small tributaries of the Ohio River. The present valley of the Ohio River was cut into the shale and limestone bedrock during glacial times. The rock valley was filled with alluvium of Quaternary age which underlies the Ohio River flood plain to a maximum depth of 130 feet. The alluvium and the bedrock form two interconnected aquifers.

The alluvium in the Ohio River flood plain is the principal aquifer and, next to the river, is the second most important source of water in the area. The aquifer is comprised of outwash sand and gravel of Pleistocene age ranging from 0 to 100 feet in thickness, overlain by a blanket of silt and clay as much as 40 feet thick. Very thin deposits of clay and silt of Recent age cover parts of the flood plain. The entire thickness of alluvium, known as the Ohio River Valley Series, is considered a single hydrologic unit. This aquifer supplies some domestic wells and many

industrial wells in the area and has an average transmissivity of 68,500 gpd/ft (Ref. 2).

The alluvial aquifer is hydraulically connected with the Ohio River in this area. Infiltration from the Ohio River and flow through the limestone valley wall are major contributors of recharge to the aquifer. Groundwater flow is generally toward the Ohio River (Ref. 1). Since the Ohio River acts as a groundwater divide, it is considered to be a barrier to contaminant transport across the river.

The Louisville Limestone of Silurian age and the Jeffersonville and Sellersburg Limestones of Devonian age underlie the alluvium. These bedrock formations are considered a single aquifer. Water in this aquifer is contained in and moves along interconnected cracks and solution channels (Ref. 2). The limestone beneath the flood plain is hydraulically connected with the alluvial deposits of sand and gravel, from which a continuing source of recharge is available. In the Bluegrass region the limestone supplies small quantities of water to domestic wells, but beneath the Ohio River alluvium it is capable of yielding large quantities of water, mostly for industrial use (Ref. 4).

2.4 Critical Habitats and Endangered Species

There are no critical habitats or sensitive environments identified within the 4-mile radius or within 15 stream miles downstream of the site. However, the least tern (Sterna antillarum), a federally endangered species, resides along the Ohio River in Kentucky (Ref. 5).

3.0 Site Description

3.1 Site Location

The American Standard facility is located at 1541 South Seventh Street, Louisville, Kentucky. The latitude is 38°13'15"N and the longitude is 85°46'10"W.

3.2 Site Features

The facility is located within an area bounded by the Louisville-Nashville Railroad line on the east, Shipp Street on the north, South Seventh Street on the northwest, and the Southern Railroad line and a residential neighborhood on the southwest. The facility consists of approximately 32 buildings, many of which are connected (See facility plot plan). The surrounding land use is mixed industrial and residential, with the campus of the University of Louisville located approximately one-half mile to the southeast. Photo #16 shows a view of the neighborhood to the west of Building #36. Distinctive site features include the smokestack which is 76 feet high and is based in the iron foundry, Building #117.

3.3 Ownership History

The American Standard facility has been operating on a continuous basis at its present location for approximately 80 years.

3.4 Nature of Operations

American Standard manufactures sanitary ware consisting of bathtubs, sinks, and urinals. The manufacturing process begins in the foundry, where pig iron, scrap iron and limestone are heated with coke in the cupola. Molten metal is poured into molds made of sand, which has been set in the desired shapes.

Slag from the molten metal is transferred to a pit, quenched, and removed to a sand pile. Analysis of the slag (performed on 7-19-89) showed it to be non-hazardous. Analysis of the slag quench (performed 4-27-89) showed concentrations of lead at 0.21 mg/l, chromium at 2.12 mg/l, and cadmium at 0.001 mg/l. The quench is discharged to the Metropolitan Sewer District system.

Dust from the cupola is filtered out by a baghouse, located between Building 117 and Building 131. Analysis of the cupola baghouse dust and bags (performed 4-3-89) showed it to be a hazardous waste, with EP toxicity levels of lead at 9.2 mg/l and cadmium at 4.2 mg/l. The 720 bags are periodically disposed of as hazardous waste.

Sand is recycled until no longer usable, at which time it is stored in a sand pile near Building 131 and then disposed of as non-hazardous waste. EP toxicity analysis (performed 7-19-89) showed lead at 1.22 mg/l and cadmium at 0.006 mg/l.

Lubricating oils are picked up by First Recovery Company. Analysis performed on 7-13-89 showed no detectable levels of PCBs or halogens.

Five dust collection machines, called roto-clones, generate a sand sludge which is dried and added to the sand pile. Analysis performed on 5-10-89 showed the dried sludge to be non-hazardous.

The molded sanitary ware is conveyed to the cleaning house, Building 57, where it undergoes sand-blasting and grinding operations. A Pangborn dust collector generates sand waste which was analyzed on 8-26-85 and shown to be non-hazardous. After leaving the grinder, the ware goes to the basecoat slush booth for a spray coating consisting of frit, soda ash, and clay. Frit is a mixture which contains 4% litharge, or lead monoxide. The coating is recycled in a closed-loop system, which produces a hazardous filter cake. Analysis of the filter cake (performed 5-15-89) showed lead at 21 mg/l, cadmium at 0.01 mg/l, and pH at 11.3.

The ware then goes to a dryer and on to the enamel shop, which is located in Building 83. Enamel powder is sifted onto the sanitary ware, after which the ware is baked in a furnace. Enamel powder which is spilled further than ten feet from the furnace is collected as hazardous waste. Analysis (performed 4-3-89) showed lead at 5.8 mg/l and cadmium at 0.54 mg/l.

Enamel powder is produced and recycled in Building 32. Raw materials and recycled powder are mixed and blended on the fifth, fourth, and third floors, while smelting takes place on the second floor. Water used for cooling the smelted enamel (glass) was tested on 2-10-88 and found to be non-hazardous. On the first floor, the glass is ground into powder by ball mills and stored for use in the manufacturing process.

Satellite areas for drums of hazardous waste are located near Building 36, and in the enamelware unloading station between Buildings 83 and 85. There is a temporary accumulation area for waste enamel powder and solidified basecoat slush, located next to Building 62. Used bags from the cupola baghouse are stored temporarily in Building 85. The facility has one transformer on site with 698 kg of fluid having a PCB content of over 500 ppm, and 10 transformers with fluid having PCB contents of 50 to 499 ppm.

3.5 Review of CERCLA, SARA, Air, and Water Pollution Files

CERCLA -- The only information in CERCLA files is a reference to a site discovery of American Standard in August, 1989. This refers to initial efforts by EPA, Region IV, to conduct a facility assessment similar to the RFA covered by this report. The Kentucky Division of Waste Management was given the responsibility for following through with the RFA.

SARA Title III -- The Section 313 summary report for the year 1988 provided an estimate of 142,073 pounds of hazardous substances generated by American Standard, 95% of which were disposed of in permitted landfills off-site. Stack emissions, permitted by the local air pollution district, accounted for 4% of the total, and estimated fugitive emissions and estimated wastewater discharges to publicly-owned treatment works comprised less than 1% of the total.

84% of the waste was reported to be made up of lead-containing compounds, 15% antimony-containing compounds, and 1% manganese.

Jefferson County Air Pollution Control District -- There have been no recorded violations or complaints about the facility since January 1980. Between 1976 and 1980 there were nine reported violations, each of which resulted in a fine of \$25 to

\$100. Three of the violations were for excessive visual opacity of the stack emissions from the foundry or the boiler. The four most recent violations (January 1980) resulted from a malfunction of the #2 Roto-Clone dust collector, causing it to blow dust into the ambient air rather than collecting it. One violation was the failure to report a malfunctioning baghouse collector. The violation on 2-22-77 was for fugitive emissions which were carried by high winds from the hoppers under the baghouse, and were deposited as dense gritty material in the nearby residential neighborhood.

Municipal Sewer District (MSD) of Jefferson County -- Review of the MSDs Incident Response Summaries identified four incidents between 1985 and January 1990. All four releases of fuel or solvent either were cleaned up immediately or entered the city's sewer system. Tests of area sewers after these releases showed no measurable explosion potential. No adverse environmental conditions reportedly resulted from the four releases.

3.6 SWMU Report Submitted by American Standard

Facility personnel submitted a description of solid waste management units on August 3, 1990. The summary table included with this report is reproduced here as Table 1. Of the units listed by American Standard, the "refuse incinerator" or trash-burning area was subsumed into SWMU #11, the inactive landfill; the "wastewater treatment unit," which does not generate hazardous wastes, was considered a unit regulated by the Municipal Sewer District; and the "materials recycling/reuse operation" was considered a waste-minimization measure which is a part of the production process and not subject to regulation under RCRA.

3.7 Regulatory History

The facility is a large-quantity generator of hazardous wastes.

On January 8, 1985 the Division of Waste Management informed American Standard that it was a treatment facility because of the mixing of cupola beghouse dust with non-hazardous foundry sand in dump trucks. The firm's 1985 Hazardous Waste Facility Annual Report therefore reflected on-site treatment of the dust.

The company later decided to segregate its waste streams and close its "treatment facility". American Standard submitted an initial draft of a closure plan on August 30, 1985. The plan was approved on April 13, 1987, and closure certification was received on November 19, 1987. The facility was released from closure financial requirements on November 14, 1988.

TABLE 1 -- SWMU Report Submitted by American Standard

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PAGE 1 OF 2

WASTE MANAGEMENT UNIT	DESCRIPTION OF WASTE	RCRA HAZARDOUS	VOLUME	LOCATION	ACTIVE	COMMENTS
LANDFILL	Boiler Cinders and Other Plant Refuse		Estimated Surface Area 122,400 Sq. Ft.	#1 - See Site Plan	NO	
PILE	Foundry Sand, Grinding Dust, Cupola Slag	NO	Average Size Approx. 50 Cu. Yds.	#2 - See Site Plan	YES	
REFUSE INCINERATOR	Miscellaneous Wooden Refuse (Pallets, Lumber, and Trash)	NO	Periodically Used in Past	#3 - See Site Plan	NO	
ABOVE GROUND ACCUMULATION TANK	Base Coat Slush (Liquid Frit Compound)	YES	10,000 Gals. Approx.	#4 - See Site Plan	NO	Waste was shipped off site within 90 days.
CONTAINER ACCUMULATION	Misc. Oil Wastes	NO	Up To Approx. 100 Drums Total With Various Amounts of Liquid	#5A #5B #5C See Site Plan	NO NO YES	Disposal (Offsite) from #5A, #5B ceased in 1989.
	Waste Solvents	YES	Maximum of 4 Drums Total	#6A #6B See Site Plan	NO YES	Waste is shipped off site within 90 days.

TABLE 1, continued

PAGE 2 OF 2

WASTE MANAGEMENT UNIT	DESCRIPTION OF WASTE	RCRA HAZARDOUS	VOLUME	LOCATION	ACTIVE	COMMENTS
CONTAINER ACCUMULATION	Waste Knamel Powder, Cupola Bag House Dust, Solidified Base Coat Slush	YES	55 Gallon Drums or Accumulated in 1.5 Cu.Yds or 1.0 Cu.Yds. Shipping Bags	#7A #7B See Site Plan	NO YES	Waste is being shipped off site within 90 Days
	Roll Off Boxes and Compactors for Plant Refuse	NO	10, 20, and 30 Cu. Yd. Boxes	#8 - See Site Plan	YES	
	Waste Knamel Powder, Cupola Bag House Dust, Solidified Base Coat Slush	YES	1 - 20 Cu. Yd. Dump Trailer	#9 - See Site Plan	NO	Operation Ceased in 1989. Waste was shipped within 90 days
WASTE WATER TREATMENT UNITS	Cupola Slag Removal from Waste Water	NO	3 Cu. Yds Per Day (Slag)	#10 - See Site Plan	YES	
TEMPORARY ACCUMULATION TRANSFER STATION	Solidified Base Coat Slush, Waste Knamel Powder	YES	Approx. 4 Yds. Per Week	#11A #11B See Site Plan	NO YES	#11A Operation Ceased in 1989.
	Roll-Off Box Liquid Base Coat	YES	4,000 Gals. Approx.	#12 - See Site Plan	NO	Ceased Operation in 1989.
MATERIALS RECYCLING/REUSE OPERATION	Excess Knamel Powder	YES	Approx. 2,000,000 Lbs. in 1989	#13 - See Site Plan	YES	

4.0 Solid Waste Management Units (SWMUs)

This section provides a description of each SWMU, the wastes managed, releases from the unit, and interim recommendations. The following table (Table 2) summarizes this information.

TABLE 2
SWMU Summary

<u>SWMU Number</u>	<u>Name of Unit</u>	<u>Wastes Managed</u>	<u>Probability of Release</u>	<u>Interim Recommendation</u>
1	Trash Dumpster	Non-hazardous Trash	Low	No Further Action
2	Trash Compactor & Dumpster	Non-hazardous Trash	Low	No Further Action
3	Sand and Slag Piles	Cupola Slag, Foundry Sand, Grinding Dust	Low	No Further Action
4	Loading Area Under Cupola Baghouse	Baghouse Dust	Low	No Further Action
5	Site of Trash Dumpster	Non-hazardous Trash	Low	Cleanup of Debris
6	Temporary Waste Staging Area	Spent Solvents, Enamel Powder, Baghouse Dust, Solidified Base- coat Slush	Low	No Further Action
7	Temporary Waste Staging Area	Solidified Base- coat Slush, Enamel Powder	Low	No Further Action
8	Former Waste Staging Bldg.	Solidified Base- coat slush, Enamel Powder, Waste Oils, Spent Solvents, Baghouse Dust	Low	Testing for Hazardous Constituents
9	Former Dump Trailer Site	Enamel Powder Baghouse Dust	Low	No Further Action

TABLE 2
SWMU Summary (Continued)

<u>SWMU Number</u>	<u>Name of Unit</u>	<u>Wastes Managed</u>	<u>Probability of Release</u>	<u>Interim Recommendation</u>
10	Former Container Storage Area	Waste Oils	High	Testing for Hazardous Constituents
11	Inactive Landfill	Unknown	High	Testing for Hazardous Constituents
12	Trash Dumpster	Non-hazardous Trash	Low	No Further Action
13	Site of Former Roll-Off Box	Liquid Basecoat	Low	No Further Action
14	Basecoat Tank and Dike	Basecoat Slush	Low	Testing for Hazardous Constituents
15	Container Storage Area	Waste Oils	Low	No Further Action

SWMU #1. Trash Dumpster (Photo #1)

Description

This dumpster is located east of the general offices of the facility near the 7th Street entrance. The unit is currently in use.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been placed in the unit.

Releases

The concrete berth in which the unit rests collects water. No staining, odors, or evidence of releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #2. Trash Compactor and Dumpster (Photo #2)

Description

This unit, which is currently in use, is located west of the cupola baghouse and Building 131.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been handled by the unit.

Releases

The compactor and dumpster rest on an asphalt paved area with drainage to the Metropolitan Sewer District (MSD) system. No evidence of release was noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #3. Sand and Slag Piles (Photo #3)

Description

These piles, which are currently having materials added to and removed from them, are located on the west side of Building 131. The total volume of materials is approximately 50 cubic yards.

Wastes Managed

The tan-colored pile shown at the right of Photo #3 consists of cupola slag, while the black material shown at the left is foundry sand and grinding dust. EP toxicity tests performed on these materials during 1989 showed each to be non-hazardous.

Releases

The entire area is paved with asphalt and drains into the MSD sewer system. Depending on where the exact boundaries of the SWMU are defined to be, there may be tracking of materials from the unit on the wheels of trucks. According to file information and facility personnel, there have been no releases of hazardous materials from this unit.

Recommendation

No further action.

SWMU #4. Loading Area Under Cupola Baghouse (Photo #4)

Description

The cupola baghouse is located between Buildings 131 and 117, and is currently in use. The baghouse is supported on pillars, allowing vehicles to be driven underneath the dust discharge chute.

Wastes Managed

The cupola baghouse discharges dust which had hazardous levels of lead, according to an EP toxicity test performed in April 1989. The same procedure also showed the level of chromium to be 4.2 mg/l, which is only slightly below the regulatory level of 5.0 mg/l.

Releases

The file review identified a release of solid material from this unit to the atmosphere on February 22, 1977, as described in Section 3.5 of this report. The depressed area underneath the baghouse can hold rainwater, which eventually evaporates. Current practice is to discharge the baghouse dust directly into a bag resting on a pile of wooden pallets. The bag and uppermost pallet are then moved by forklift to the temporary waste staging area (SWMU #6). This procedure represents an improvement in the previous practice of discharging dust into a dump truck which had backed underneath the hopper.

Recommendation

No further action.

SWMU #5. Site of Trash Dumpster (Photo #5)

Description

The area shown in Photo #5 normally has a trash dumpster, similar to SWMU #1 and #12. On the day of the VSI, it had just been hauled out for emptying. The location is between Buildings 32 and 70.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been placed in the unit.

Releases

Apparently some trash doesn't always get deposited in the dumpster. The area is paved with asphalt and drains into the MSD sewer system. According to file information and facility personnel, there have been no releases of hazardous materials from this unit.

Recommendation

Trash and debris in the area should be cleaned up.

SWMU #6. Temporary Waste Staging Area (Photo #6)

Description

This unit is located inside an attached annex of Building 83, also known as the "Smallware Unloading Station". It is currently used as a temporary storage area (less than 90 days) for containers.

Wastes Managed

A maximum of four 55-gallon drums of spent solvents are accumulated here at any one time. The waste code is F001. Waste enamel powder, cupola baghouse dust, and solidified basecoat slush are stored in 55-gallon drums or shipping bags with capacities of 1.0 cubic yard and 1.5 cubic yards. Hazardous constituents of these powders are lead (D008) and, in the case of the cupola baghouse dust, cadmium (D006).

Releases

The floor of the building is a concrete slab, enabling spills to be cleaned up easily. No staining, odors, or evidence of releases were noticed during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #7. Temporary Waste Staging Area (Photo #7)

Description

This unit, which is currently in use, is located at the other end of the same building as SWMU #6.

Wastes Managed

Approximately four cubic yards of solidified basecoat slush (D008) and waste enamel powder (D008) pass through this area per week.

Releases

The floor of the building is a concrete slab, enabling spills to be cleaned up easily. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #8. Former Waste Staging Building (Photo #8)

Description

Photo #8 shows the view lengthwise through Building 85 looking toward the northeast. The building has not been used to store wastes since 1989.

Wastes Managed

Prior to 1989, solidified basecoat slush (D008) and waste enamel powder (D008) were stored in containers near the northeast end of the building. The other end (near camera) previously stored containers of non-hazardous waste oils, hazardous spent solvents (F001 and F002), waste enamel powder (D008), cupola baghouse dust (D008 and D006), and solidified basecoat slush (D008).

Releases

The floor of the building is a concrete slab. Facility personnel mentioned during the VSI that the roof has a leak. A square concrete trench running the length of the building contains pipes. A white powder was observed on the floor and in the trench. According to file information and facility personnel, there have been no releases from this unit.

Although the probability of future releases of hazardous constituents from this unit is low, only testing and analysis of the powder could determine conclusively whether it contains hazardous constituents and whether cleanup activities would be necessary.

Recommendation

Random sampling and analysis of the powder on the floor and in the pipe chase should be performed. Constituents tested for should include lead, cadmium, chromium, and the organic waste solvents believed to have been stored in the building. If the waste is found to contain hazardous constituents, the powder should be removed down to the bare concrete surfaces. The surfaces should then be tested again to ensure that cleanup efforts have been successful.

SWMU #9. Former Dump Trailer Site (Photo #9)

Description

The unit consists of a concrete loading bay under the roof of Building 115, where a 20 cubic yard dump trailer was stored until 1989.

Wastes Managed

According to facility personnel, the trailer handled waste enamel powder (D008), cupola baghouse dust (D008 and D006), and solidified basecoat slush (D008).

Releases

No staining, odors, or evidence of releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #10. Former Container Storage Area (Photo #10)

Description

The unit is an imprecisely defined, gravel-surfaced area to the southeast of Building 115 and adjacent to the inactive landfill (SWMU #11). The topography is approximately level.

Wastes Managed

According to facility personnel, miscellaneous non-hazardous waste oils were stored in this general vicinity in 55-gallon drums until 1989. Up to 100 such drums were stored at the unit at any one time.

Releases

The surface showed some discoloration in places from a dark carbonaceous material. Vegetation was sprouting through the gravel (Ref. 3).

Recommendation

Soil sampling should be performed to determine if hazardous materials were released to the soil. Sampling should focus on the darkened areas. Constituents tested for should include the hazardous organic compounds which have been used at the facility in the past, PCBs, lead, cadmium, and chromium. If hazardous constituents are found, American Standard should be required to address this SWMU in a RCRA Facility Investigation (RFI).

SWMU #11. Inactive Landfill (Photos #11A, #11B, #11C)

Description

The unit is an unpaved area of approximately 2.5 acres, of triangular shape, located in the southeast corner of the property. Most of the area is level, with some signs of surface water flow as indicated by the dotted lines in Figure 1. There is a slightly lower area (approximately one foot) near the southern boundary of the property adjacent to the Allied Drum Recycling facility.

Photo #11A shows some of the 55 gallon drums which are stacked on their sides, just beyond a chain-link fence on the property of Allied Drum Recycling. The drums' contents, if any, are not known.

In the foreground of Photo #11A, a buried concrete structure is shown, which may represent the site where trash used to be burned (Ref. 3).

Wastes Managed

No information is available, from either files or facility personnel, concerning the types or quantities of wastes brought to the unit, the dates when the unit was operating, or the unit's operating practices. Facility personnel speculate that trash and boiler cinders, all non-hazardous, were buried there.

Photo #11B shows a pile of dark material which on closer inspection appeared to be similar to cupola slag. Vegetation was sprouting from the pile (Ref. 3).

Photo #11C, taken near the southeast corner of the property, shows wood and other debris which was apparently piled in place by a bulldozer. No signs of hazardous materials were evident (Ref. 3).

Releases

There is no evidence that the landfill was constructed with a liner either below or above the wastes. Because the site is essentially level, most of the rainwater falling on it probably leached downward through the waste and into the groundwater. If hazardous wastes were deposited in the unit, leaching and subsequent release of hazardous constituents to the environment are probable.

Recommendation

A phased sampling and analytical approach is recommended. The purpose of the first phase would be to determine whether the unit contains hazardous constituents. Random soil testing, at a range of depths, could provide information which would guide any subsequent phases of the investigation. Testing should be performed for at least the following constituents: lead, cadmium, chromium, PCBs, and the organic hazardous compounds which have been used at the facility in the past. If hazardous constituents are found, American Standard should be required to address this SWMU in an RFI.

SWMU #12. Trash Dumpster (Photo #12)

Description

This dumpster is located between Buildings 83 and 82, and is currently in use.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been placed in the unit.

Releases

The dumpster rests on a paved area with drainage to the MSD system. No evidence of release was noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #13. Site of Former Roll-Off Box (Photo #13).

Description

This unit is located on the southwest side of Building 57. The metal roll-off box, which rested on the paved surface, had a capacity of approximately 4,000 gallons. It was removed in 1989.

Wastes Managed

According to facility personnel, the roll-off box stored liquid basecoat (D008) on an intermittent basis.

Releases

No staining, odors, or evidence or releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #14. Basecoat Tank and Dike (Photo #14)

Description

The tank is located in a concrete diked area outside the western corner of Building
It was taken out of service in 1989 and was empty, with an open manway, at the
(ref. 3).

Wastes Managed

According to facility personnel, the tank stored liquid basecoat slush (D008) on an
intermittent basis.

Releases

According to file information and facility personnel, there have been no releases
from this unit. The concrete diked area contains debris, equipment, and waste
material which facility personnel believe to be non-hazardous. If hazardous
material had been released from the tank, it would probably have been retained by
the concrete base and dike.

Although the probability of future releases of hazardous constituents from the tank
and dike system is low, only testing and analysis of the waste material within the
dike could determine whether hazardous constituents are present and whether
cleanup activities would be necessary.

Recommendation

A wipe test should be performed on the inner surface of the bottom of the tank to
ascertain whether all of the D008 waste has been removed. The waste materials
deposited throughout the diked area should be sampled and analyzed for lead and
cadmium. If hazardous constituents are found, the waste should be removed down to
the bare concrete surfaces. The surfaces should then be tested again to ensure that
cleanup efforts have been successful.

SWMU #15. Container Storage Area (Photo #15)

Description

This unit is located along the southwestern wall of Building 36 and is currently in use. It is covered above and open on three sides.

Wastes Managed

According to facility personnel, only non-hazardous waste oil is stored at the unit. Up to 100 drums, containing various amounts of oil, are present at any one time. The oils are collected by First Recovery Co. for recycling.

Releases

The unit's base is a concrete slab. Any releases of liquid wastes which might leak from a drum would flow into the MSD system. No staining, odors, or evidence of releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

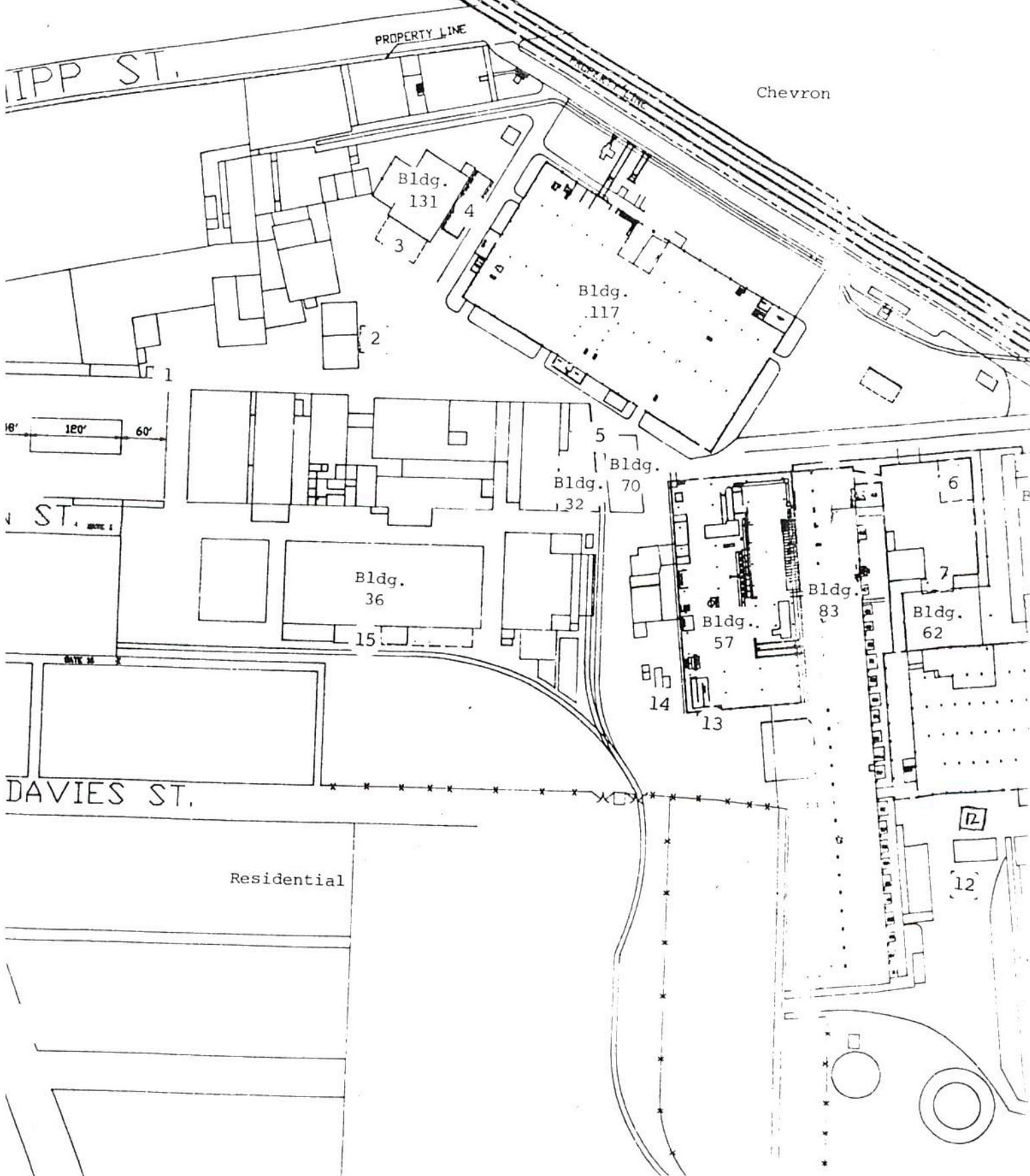
Recommendation

No further action.

REFERENCES

1. Bell, E.A., 1966. "Summary of Hydrologic Conditions of the Louisville Area, Kentucky." U.S. Geological Survey Water Supply Paper 1819-C.
2. Gallaher, J.T. and W.E. Price, Jr., 1966. "Hydrology of the Alluvial Deposits in the Ohio River Valley in Kentucky." USGS Water Supply Paper 1815.
3. Kentucky Division of Waste Management, Hazardous Waste Branch, , "Field Logbook for the Visual Site Inspection of American Standard, Inc." August 29, 1990.
4. MacCary, L.M., 1956. "Availability of Ground Water for Domestic Use in Jefferson County, Kentucky." U.S. Geological Survey Hydrol. Inv. Atlas HA-8.
5. U.S. Fish and Wildlife Service, 1988. Endangered and Threatened Species of the Southeastern United States.
6. U.S. National Oceanic and Atmospheric Administration, 1983. Climatic Atlas of the United States.

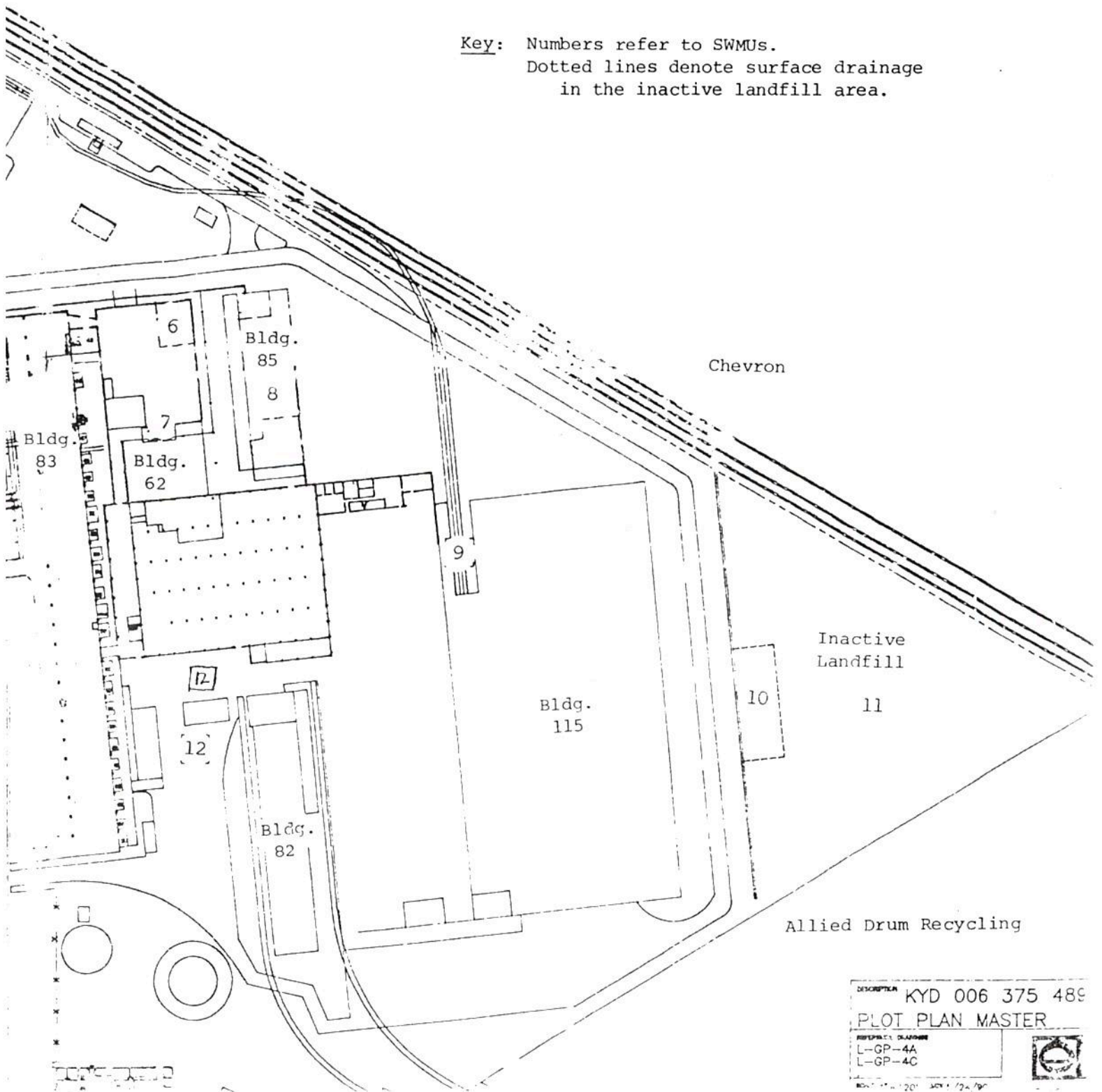
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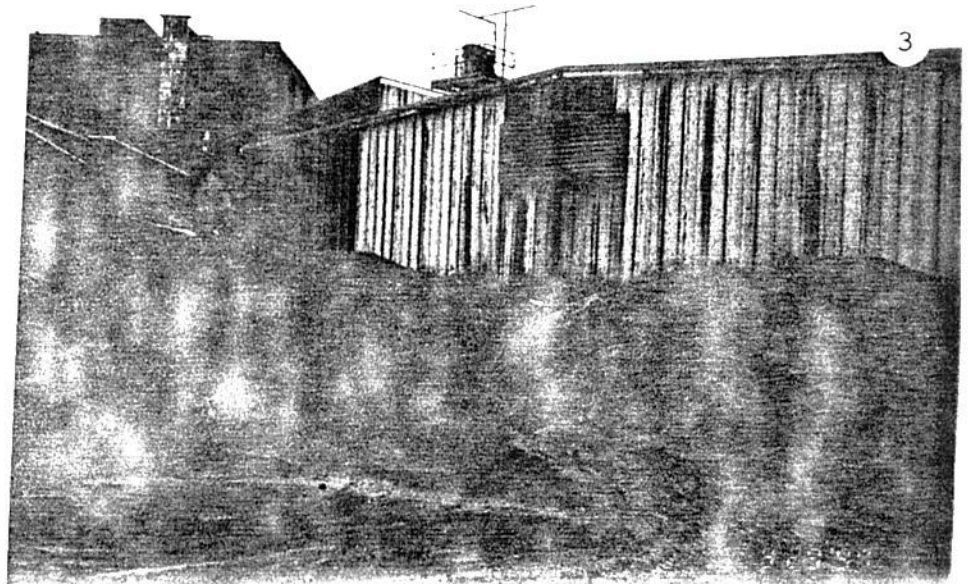
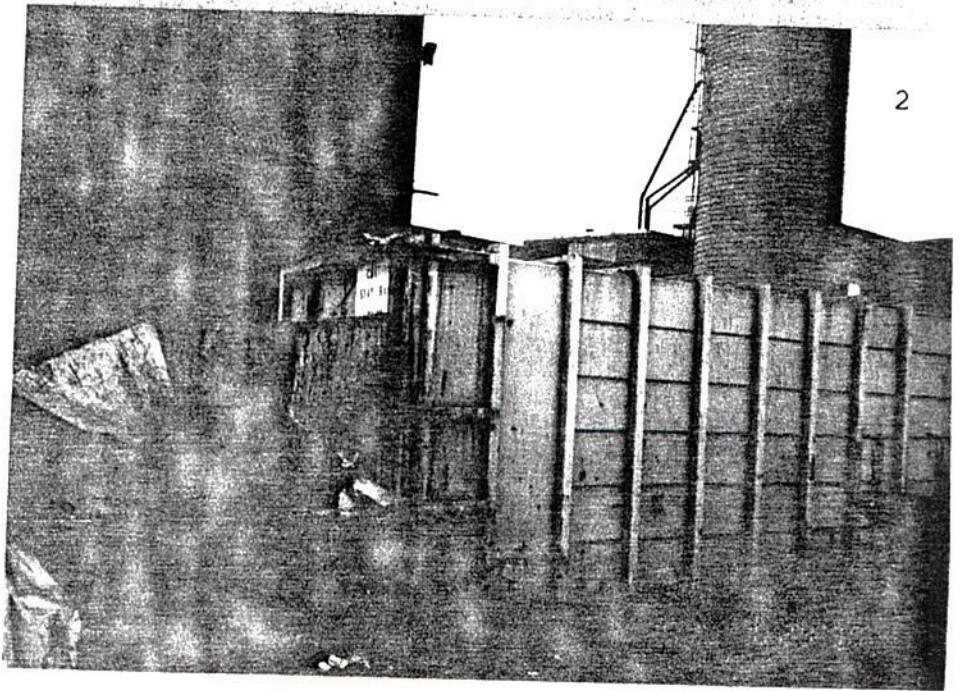
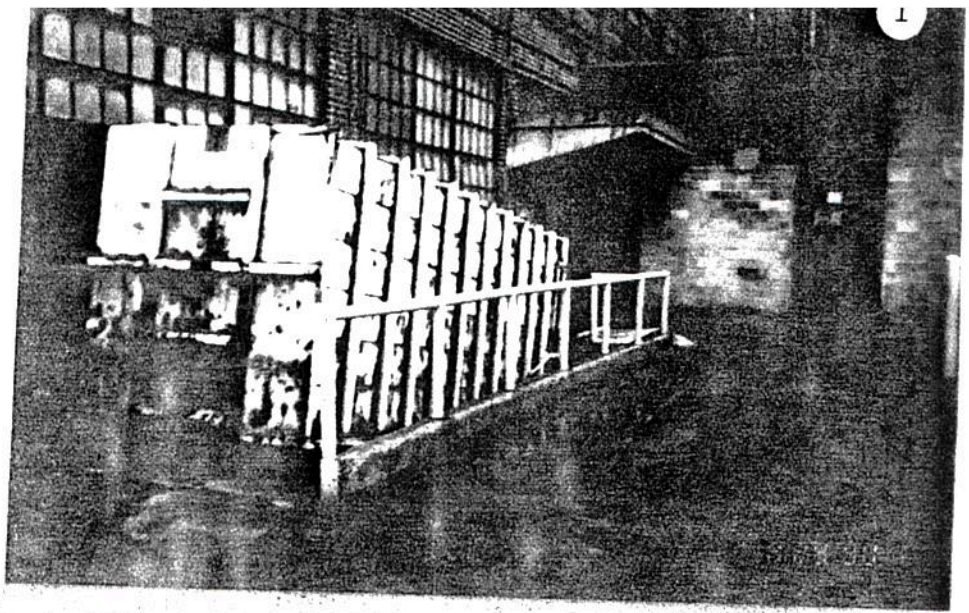


con

FIGURE 1 -- Facility Plot Plan
American Standard, Inc.
Louisville, Kentucky

Key: Numbers refer to SWMUs.
Dotted lines denote surface drainage
in the inactive landfill area.





American Standard Inc.

Trash Dumpster near facility offices.

29-90 KYD-006-375-489

PHOTO #1

Geoffrey M. Young

1

American Standard Inc.

Trash Compactor and Dumpster west of
cupola baghouse.

8-29-90 KYD-006-375-489

PHOTO #2

Geoffrey M. Young

2

American Standard Inc.

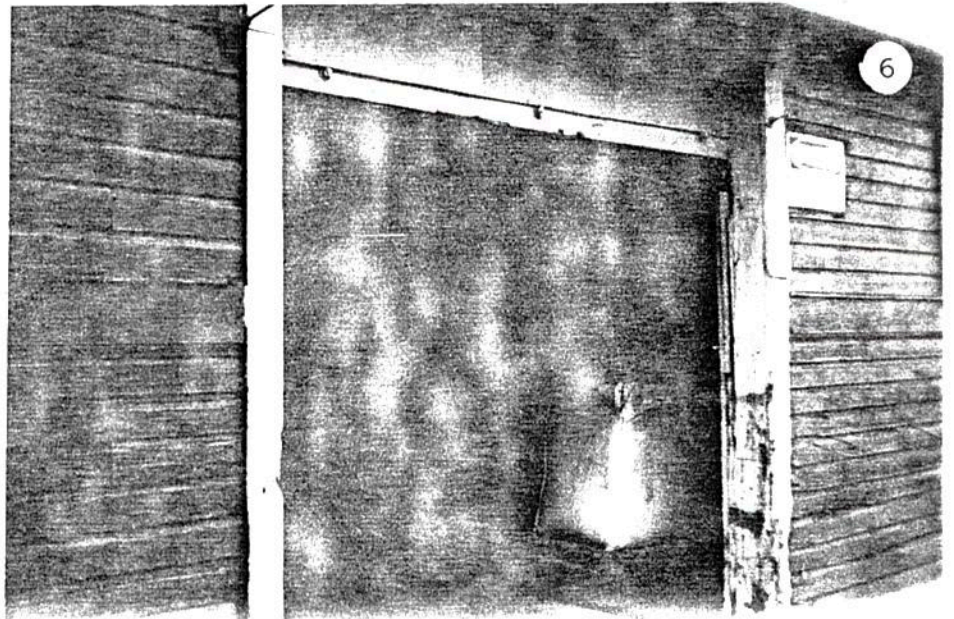
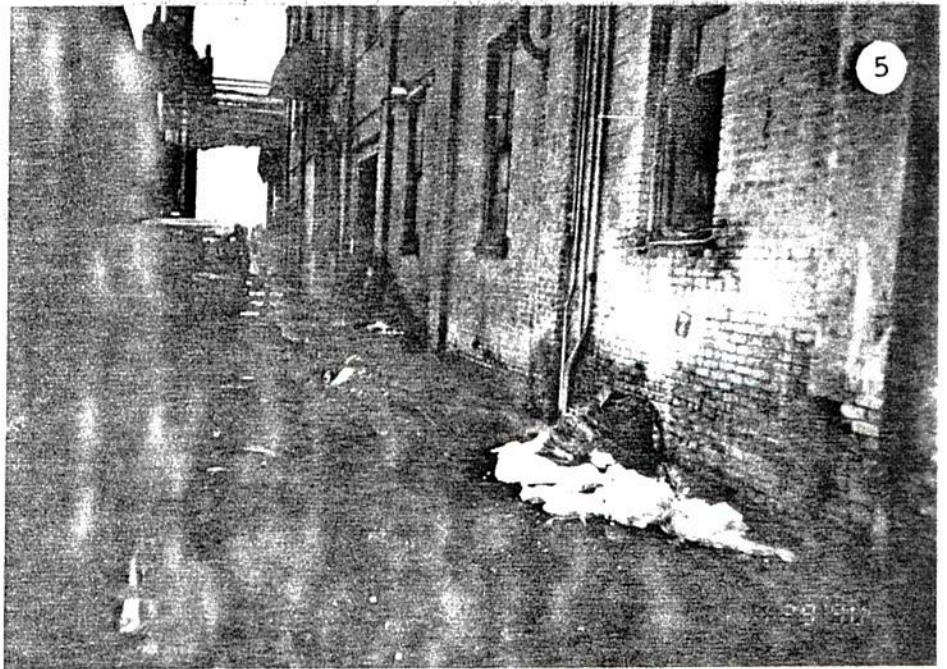
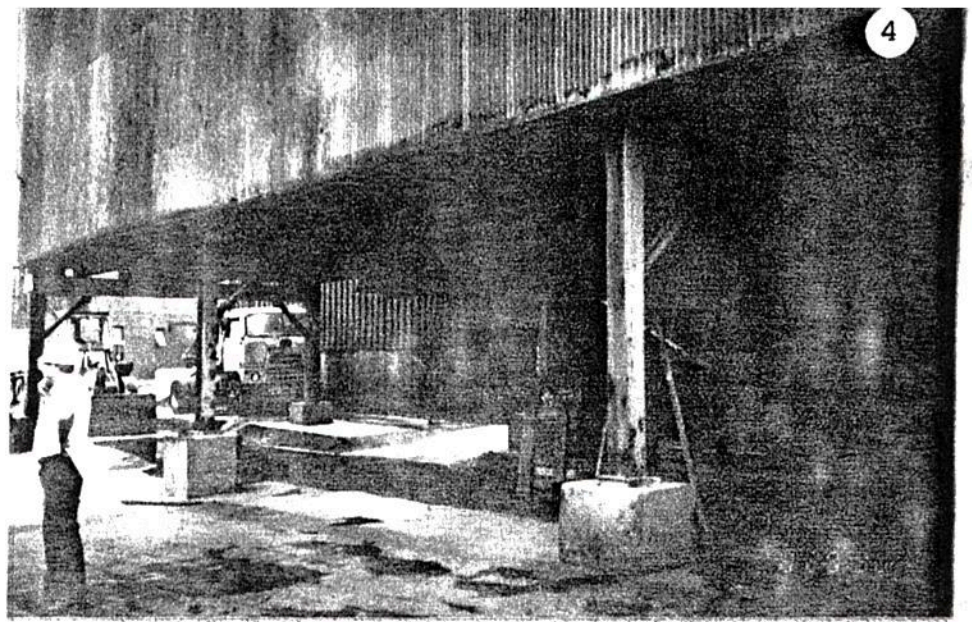
Sand and Slag Piles near Bldg. 131.

8-29-90 KYD-006-375-489

PHOTO #3

Geoffrey M. Young

3



American Standard Inc.

Loading Area Under Cupola Baghouse.

8-29-90 KYD-006-375-489

PHOTO #4

Geoffrey M. Young

4

American Standard Inc.

Site of Trash Dumpster between Bldgs.

32 and 70.

8-29-90 KYD-006-375-489

PHOTO #5

Geoffrey M. Young

5

American Standard Inc.

Temporary Waste Staging Area inside

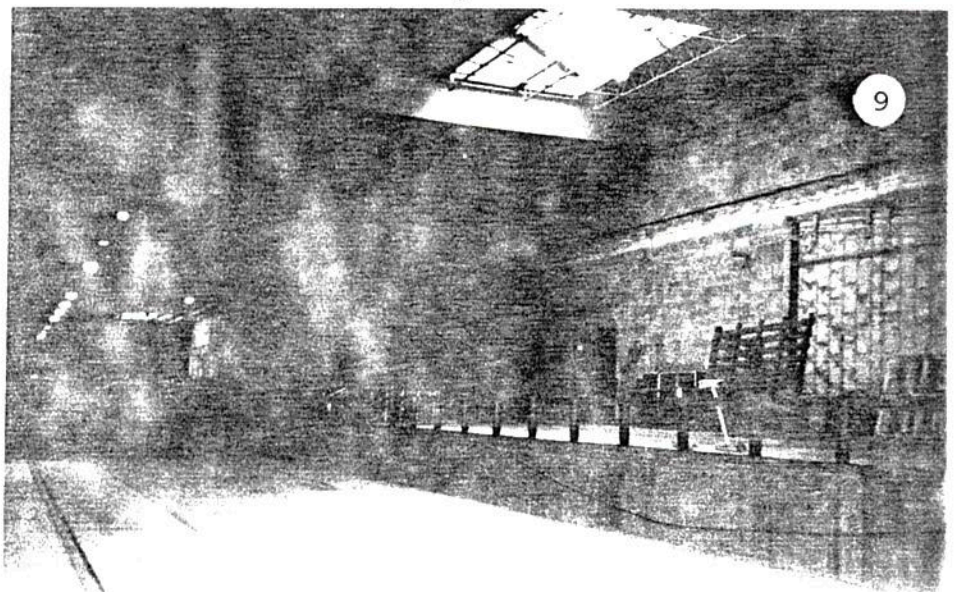
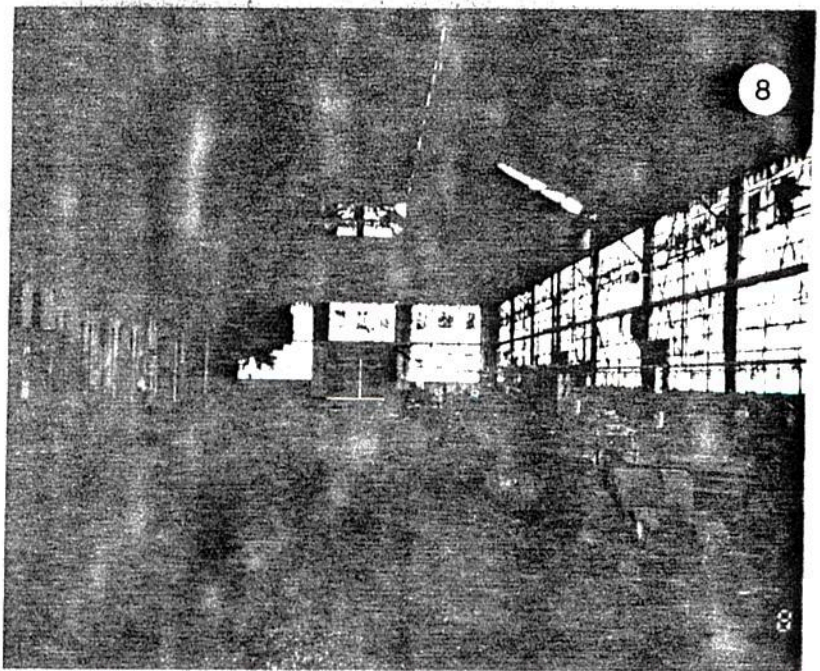
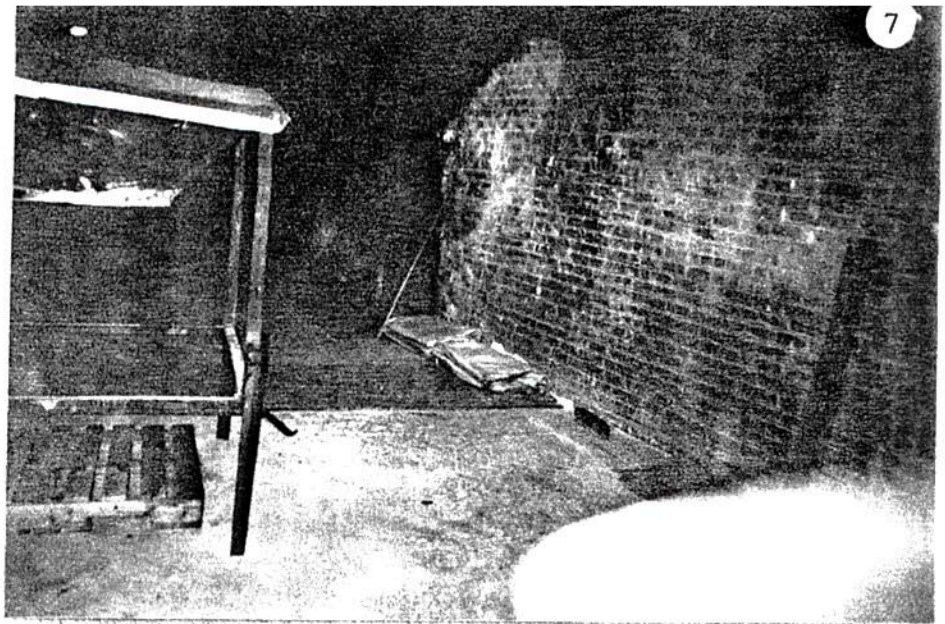
Bldg. 83.

8-29-90 KYD-006-375-489

PHOTO #6

Geoffrey M. Young

6



American Standard Inc.

Temporary Waste Staging Area inside

Bldg. 83.

1-29-90

KYD-006-375-489

PHOTO #7

Geoffrey M. Young

7

American Standard Inc.

Former Waste Staging Building, Bldg. 85.

8-29-90

KYD-006-375-489

PHOTO #8

Geoffrey M. Young

8

American Standard Inc.

Former Dump Trailer Site in Bldg. 115.

8-29-90

KYD-006-375-489

PHOTO #9

Geoffrey M. Young

9



American Standard Inc.

Former Container Storage Area, SE of

Bldg. 115.

-29-90

KYD-006-375-489

PHOTO #10

Geoffrey M. Young

10

American Standard Inc.

Inactive Landfill.

8-29-90

KYD-006-375-489

PHOTO #11A

Geoffrey M. Young

11A

American Standard Inc.

Inactive Landfill.

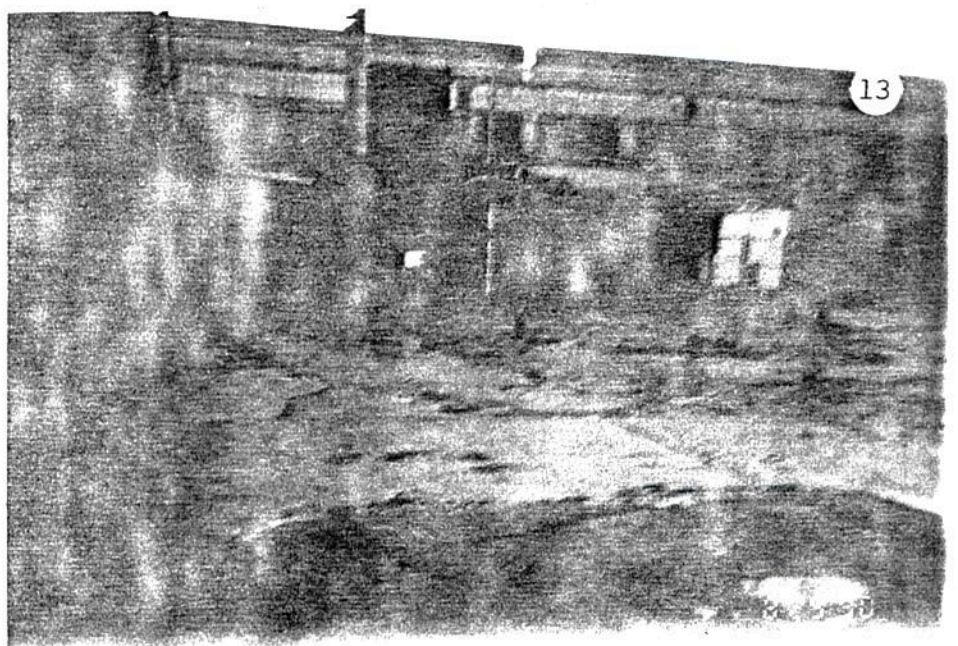
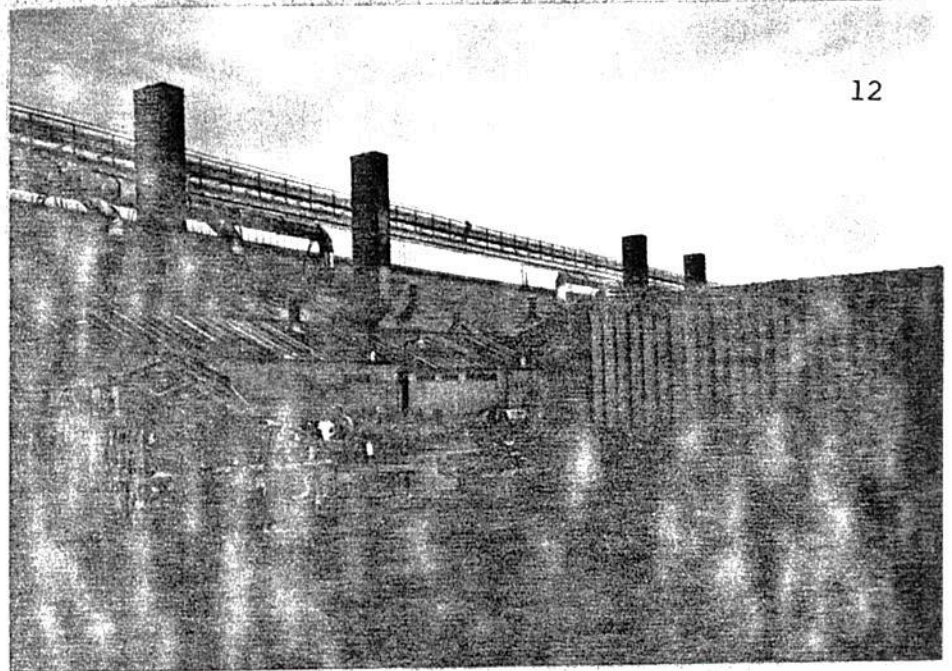
8-29-90

KYD-006-375-489

PHOTO # 11B

Geoffrey M. Young

11B



American Standar Inc.

Inactive Landfill.

8-29-90

KYD-006-375-489

PHOTO #11C

Geoffrey M. Young

11 C

American Standard Inc.

Trash Dumpster between Bldgs. 82 and 83.

8-29-90

KYD-006-375-489

PHOTO #12

Geoffrey M. Young

12

American Standard Inc.

Site of Former Roll-off Box near Bldg. 57.

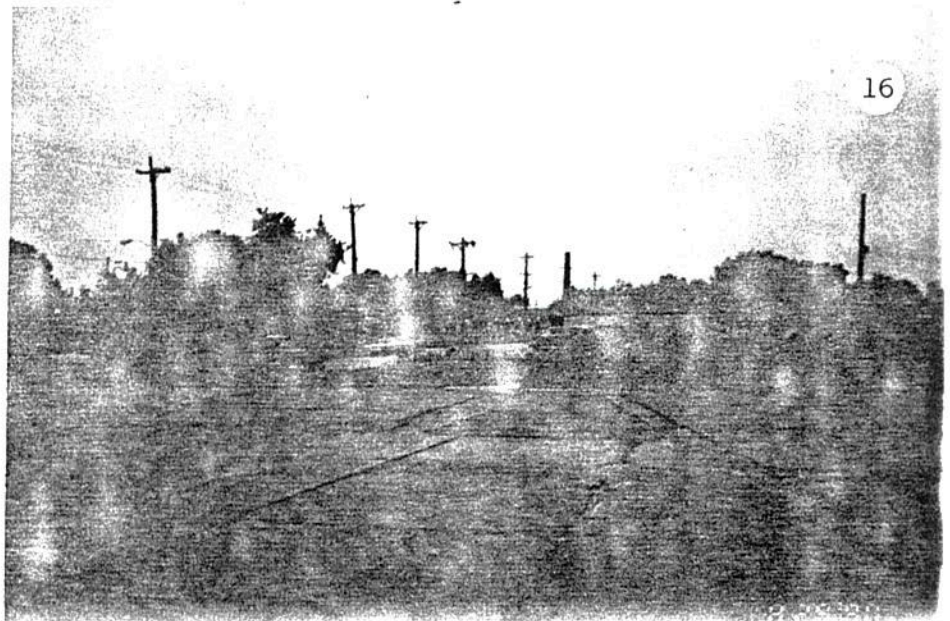
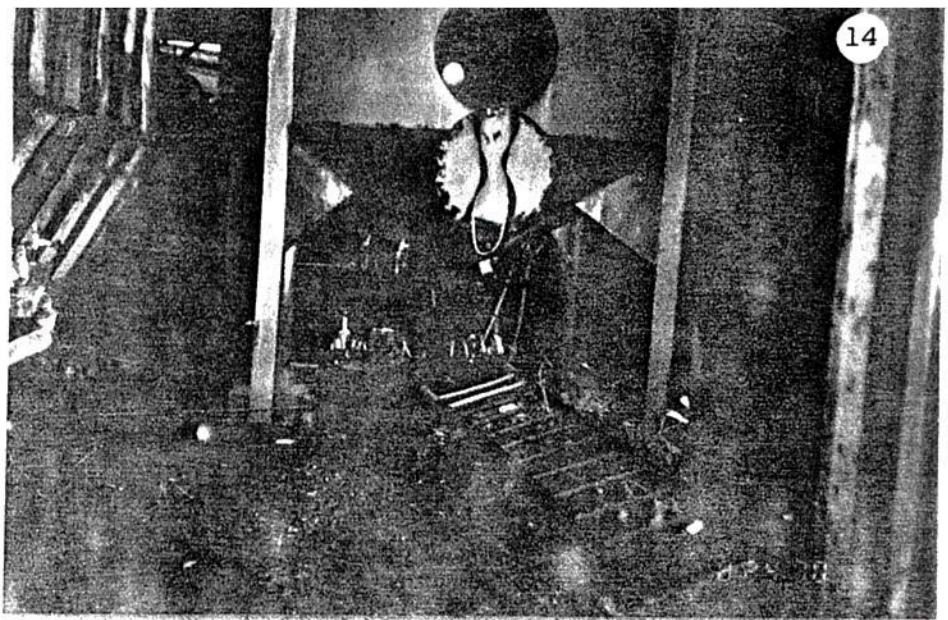
8-29-90

KYD-006-375-489

PHOTO #13

Geoffrey M. Young

13



American Standard Inc.

Basecoat Tank and Dike outside Bldg. 57.

8-29-90 KYD-006-375-489

PHOTO #14

Geoffrey M. Young

14

American Standard Inc.

Container Storage Area along Bldg. 36.

8-29-90 KYD-006-375-489

PHOTO #15

Geoffrey M. Young

15

American Standard Inc.

Residential Neighborhood west of facility.

8-29-90 KYD-006-375-489

PHOTO #16

Geoffrey M. Young

16



COMMONWEALTH OF KENTUCKY
NATURAL RESOURCES AND ENVIRONMENTAL PROTECTION CABINET
DEPARTMENT FOR ENVIRONMENTAL PROTECTION
FRANKFORT OFFICE PARK
18 REILLY ROAD
FRANKFORT, KENTUCKY 40601

March 29, 1991

James H. Scarbrough, P.E.
Environmental Protection Agency, Region IV
345 Courtland Street, N.E.
Atlanta, GA 30365

RE: American Standard, Inc. - RFA
Jefferson County, Kentucky
EPA ID# KYD-006-375-489

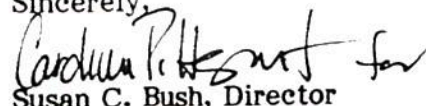
Dear Mr. Scarbrough:

The Kentucky Division of Waste Management concurs with the review comments made in the letter from your agency dated February 19, 1991.

Replacement pages for the RFA report are attached. If these revisions are satisfactory, the Division will expect to receive a joint approval letter from EPA, according to the Memorandum of Agreement.

If you have any questions concerning this matter, feel free to call Geoffrey Young at 502/564-6716.

Sincerely,


Susan C. Bush, Director
Division of Waste Management

SCB/jls

Attachments

cc: Louisville Regional Office
Mohammad Alauddin, Branch Manager
Geoffrey Young, Permit Review Section
Pending File #90-190

Approved 5-2-91



**RCRA FACILITY ASSESSMENT REPORT FOR
AMERICAN STANDARD, INC.
1541 South Seventh Street
Louisville, Jefferson County, Kentucky
EPA ID# KYD-006-375-489**

February 28, 1991

Prepared by Geoffrey Young

EXECUTIVE SUMMARY

The American Standard, Inc. facility is located in Louisville, Jefferson County, Kentucky. The plant manufactures sanitary ware consisting of bathtubs, sinks, and urinals.

The facility is a large-quantity generator of hazardous wastes, consisting mainly of lead-containing powders and dusts (EPA waste code D008).

The Visual Site Inspection (VSI) identified 15 Solid Waste Management Units (SWMUs). These SWMUs consisted of three trash dumpsters, three sites where dumpsters or roll-off boxes were previously stored, one waste pile, the loading area under the cupola baghouse, two waste staging areas, a former waste storage building, a former container storage area, an inactive landfill, an inactive hazardous waste tank, and a container storage area.

No further action is recommended for ten of the SWMUs. At one trash dumpster site, cleanup of debris is recommended. Testing and analysis for hazardous constituents are recommended for the following SWMUs: the former waste storage building, the former container storage area, the inactive landfill, and the inactive hazardous waste tank. The testing could appropriately be conducted in a RCRA Facility Investigation (RFI).

4.0 Solid Waste Management Units (SWMUs)

This section provides a description of each SWMU, the wastes managed, releases from the unit, and interim recommendations. The following table (Table 2) summarizes this information.

TABLE 2
SWMU Summary

<u>SWMU Number</u>	<u>Name of Unit</u>	<u>Wastes Managed</u>	<u>Probability of Release</u>	<u>Interim Recommendation</u>
1	Trash Dumpster	Non-hazardous Trash	Low	No Further Action
2	Trash Compactor & Dumpster	Non-hazardous Trash	Low	No Further Action
3	Sand and Slag Piles	Cupola Slag, Foundry Sand, Grinding Dust	Low	No Further Action
4	Loading Area Under Cupola Baghouse	Baghouse Dust	Low	No Further Action
5	Site of Trash Dumpster	Non-hazardous Trash	Low	Cleanup of Debris
6	Temporary Waste Staging Area	Spent Solvents, Enamel Powder, Baghouse Dust, Solidified Base-coat Slush	Low	No Further Action
7	Temporary Waste Staging Area	Solidified Base-coat Slush, Enamel Powder	Low	No Further Action
8	Former Waste Staging Bldg.	Solidified Base-coat slush, Enamel Powder, Waste Oils, Spent Solvents, Baghouse Dust	Low	Testing for Hazardous Constituents
9	Former Dump Trailer Site	Enamel Powder Baghouse Dust	Low	No Further Action

SWMU #2. Trash Compactor and Dumpster (Photo #2)

Description

This unit, which is currently in use, is located west of the cupola baghouse and Building 131.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been handled by the unit.

Releases

The compactor and dumpster rest on an asphalt paved area with drainage to the Metropolitan Sewer District (MSD) system. No evidence of release was noted during the VSL. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #3. Sand and Slag Piles (Photo #3)

Description

These piles, which are currently having materials added to and removed from them, are located on the west side of Building 131. The total volume of materials is approximately 50 cubic yards.

Wastes Managed

The tan-colored pile shown at the right of Photo #3 consists of cupola slag, while the black material shown at the left is foundry sand and grinding dust. EP toxicity tests performed on these materials during 1989 showed each to be non-hazardous.

Releases

The entire area is paved with asphalt and drains into the MSD sewer system. Depending on where the exact boundaries of the SWMU are defined to be, there may be tracking of materials from the unit on the wheels of trucks. According to file information and facility personnel, there have been no releases of hazardous materials from this unit.

Recommendation

No further action.

SWMU #4. Loading Area Under Cupola Baghouse (Photo #4)

Description

The cupola baghouse is located between Buildings 131 and 117, and is currently in use. The baghouse is supported on pillars, allowing vehicles to be driven underneath the dust discharge chute.

Wastes Managed

The cupola baghouse discharges dust which had hazardous levels of lead, according to an EP toxicity test performed in April 1989. The same procedure also showed the level of chromium to be 4.2 mg/l, which is only slightly below the regulatory level of 5.0 mg/l.

Releases

The file review identified a release of solid material from this unit to the atmosphere on February 22, 1977, as described in Section 3.5 of this report. The depressed area underneath the baghouse can hold rainwater, which eventually evaporates. Current practice is to discharge the baghouse dust directly into a bag resting on a pile of wooden pallets. The bag and uppermost pallet are then moved by forklift to the temporary waste staging area (SWMU #6). This procedure represents an improvement in the previous practice of discharging dust into a dump truck which had backed underneath the hopper.

Recommendation

No further action.

SWMU #5. Site of Trash Dumpster (Photo #5)

Description

The area shown in Photo #5 normally has a trash dumpster, similar to SWMU #1 and #12. On the day of the VSI, it had just been hauled out for emptying. The location is between Buildings 32 and 70.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been placed in the unit.

Releases

Apparently some trash doesn't always get deposited in the dumpster. The area is paved with asphalt and drains into the MSD sewer system. According to file information and facility personnel, there have been no releases of hazardous materials from this unit.

Recommendation

Trash and debris in the area should be cleaned up.

SWMU #6. Temporary Waste Staging Area (Photo #6)

Description

This unit is located inside an attached annex of Building 83, also known as the "Smallware Unloading Station". It is currently used as a temporary storage area (less than 90 days) for containers.

Wastes Managed

A maximum of four 55-gallon drums of spent solvents are accumulated here at any one time. The waste code is F001. Waste enamel powder, cupola baghouse dust, and solidified basecoat slush are stored in 55-gallon drums or shipping bags with capacities of 1.0 cubic yard and 1.5 cubic yards. Hazardous constituents of these powders are lead (D008) and, in the case of the cupola baghouse dust, cadmium (D006).

Releases

The floor of the building is a concrete slab, enabling spills to be cleaned up easily. No staining, odors, or evidence of releases were noticed during the VSL. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #7. Temporary Waste Staging Area (Photo #7)

Description

This unit, which is currently in use, is located at the other end of the same building as SWMU #6.

Wastes Managed

Approximately four cubic yards of solidified basecoat slush (D008) and waste enamel powder (D008) pass through this area per week.

Releases

The floor of the building is a concrete slab, enabling spills to be cleaned up easily. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #8. Former Waste Staging Building (Photo #8)

Description

Photo #8 shows the view lengthwise through Building 85 looking toward the northeast. The building has not been used to store wastes since 1989.

Wastes Managed

Prior to 1989, solidified basecoat slush (D008) and waste enamel powder (D008) were stored in containers near the northeast end of the building. The other end (near camera) previously stored containers of non-hazardous waste oils, hazardous spent solvents (F001 and F002), waste enamel powder (D008), cupola baghouse dust (D008 and D006), and solidified basecoat slush (D008).

Releases

The floor of the building is a concrete slab. Facility personnel mentioned during the VSI that the roof has a leak. A square concrete trench running the length of the building contains pipes. A white powder was observed on the floor and in the trench. According to file information and facility personnel, there have been no releases from this unit.

Although the probability of future releases of hazardous constituents from this unit is low, only testing and analysis of the powder could determine conclusively whether it contains hazardous constituents and whether cleanup activities would be necessary.

Recommendation

Random sampling and analysis of the powder on the floor and in the pipe chase should be performed. Constituents tested for should include lead, cadmium, chromium, and the organic waste solvents believed to have been stored in the building. If the waste is found to contain hazardous constituents, the powder should be removed down to the bare concrete surfaces. The surfaces should then be tested again to ensure that cleanup efforts have been successful.

SWMU #9. Former Dump Trailer Site (Photo #9)

Description

The unit consists of a concrete loading bay under the roof of Building 115, where a 20 cubic yard dump trailer was stored until 1989.

Wastes Managed

According to facility personnel, the trailer handled waste enamel powder (D008), cupola baghouse dust (D008 and D006), and solidified basecoat slush (D008).

Releases

No staining, odors, or evidence of releases were noted during the VSL. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #10. Former Container Storage Area (Photo #10)

Description

The unit is an imprecisely defined, gravel-surfaced area to the southeast of Building 115 and adjacent to the inactive landfill (SWMU #11). The topography is approximately level.

Wastes Managed

According to facility personnel, miscellaneous non-hazardous waste oils were stored in this general vicinity in 55-gallon drums until 1989. Up to 100 such drums were stored at the unit at any one time.

Releases

The surface showed some discoloration in places from a dark carbonaceous material. Vegetation was sprouting through the gravel (Ref. 3).

Recommendation

Soil sampling should be performed to determine if hazardous materials were released to the soil. Sampling should focus on the darkened areas. Constituents tested for should include the hazardous organic compounds which have been used at the facility in the past, PCBs, lead, cadmium, and chromium. If hazardous constituents are found, American Standard should be required to address this SWMU in a RCRA Facility Investigation (RFI).

SWMU #11. Inactive Landfill (Photos #11A, #11B, #11C)

Description

The unit is an unpaved area of approximately 2.5 acres, of triangular shape, located in the southeast corner of the property. Most of the area is level, with some signs of surface water flow as indicated by the dotted lines in Figure 1. There is a slightly lower area (approximately one foot) near the southern boundary of the property adjacent to the Allied Drum Recycling facility.

Photo #11A shows some of the 55 gallon drums which are stacked on their sides, just beyond a chain-link fence on the property of Allied Drum Recycling. The drums' contents, if any, are not known.

In the foreground of Photo #11A, a buried concrete structure is shown, which may represent the site where trash used to be burned (Ref. 3).

Wastes Managed

No information is available, from either files or facility personnel, concerning the types or quantities of wastes brought to the unit, the dates when the unit was operating, or the unit's operating practices. Facility personnel speculate that trash and boiler cinders, all non-hazardous, were buried there.

Photo #11B shows a pile of dark material which on closer inspection appeared to be similar to cupola slag. Vegetation was sprouting from the pile (Ref. 3).

Photo #11C, taken near the southeast corner of the property, shows wood and other debris which was apparently piled in place by a bulldozer. No signs of hazardous materials were evident (Ref. 3).

Releases

There is no evidence that the landfill was constructed with a liner either below or above the wastes. Because the site is essentially level, most of the rainwater falling on it probably leached downward through the waste and into the groundwater. If hazardous wastes were deposited in the unit, leaching and subsequent release of hazardous constituents to the environment are probable.

Recommendation

A phased sampling and analytical approach is recommended. The purpose of the first phase would be to determine whether the unit contains hazardous constituents. Random soil testing, at a range of depths, could provide information which would guide any subsequent phases of the investigation. Testing should be performed for at least the following constituents: lead, cadmium, chromium, PCBs, and the organic hazardous compounds which have been used at the facility in the past. If hazardous constituents are found, American Standard should be required to address this SWMU in an RFL.

SWMU #12. Trash Dumpster (Photo #12)

Description

This dumpster is located between Buildings 83 and 82, and is currently in use.

Wastes Managed

According to facility personnel, only non-hazardous wastes have been placed in the unit.

Releases

The dumpster rests on a paved area with drainage to the MSD system. No evidence of release was noted during the VSL. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #13. Site of Former Roll-Off Box (Photo #13).

Description

This unit is located on the southwest side of Building 57. The metal roll-off box, which rested on the paved surface, had a capacity of approximately 4,000 gallons. It was removed in 1989.

Wastes Managed

According to facility personnel, the roll-off box stored liquid basecoat (D008) on an intermittent basis.

Releases

No staining, odors, or evidence or releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.

SWMU #14. Basecoat Tank and Dike (Photo #14)

Description

The tank is located in a concrete diked area outside the western corner of Building
It was taken out of service in 1989 and was empty, with an open manway, at the
(ref. 3).

Wastes Managed

According to facility personnel, the tank stored liquid basecoat slush (D008) on an
intermittent basis.

Releases

According to file information and facility personnel, there have been no releases
from this unit. The concrete diked area contains debris, equipment, and waste
material which facility personnel believe to be non-hazardous. If hazardous
material had been released from the tank, it would probably have been retained by
the concrete base and dike.

Although the probability of future releases of hazardous constituents from the tank
and dike system is low, only testing and analysis of the waste material within the
dike could determine whether hazardous constituents are present and whether
cleanup activities would be necessary.

Recommendation

A wipe test should be performed on the inner surface of the bottom of the tank to
ascertain whether all of the D008 waste has been removed. The waste materials
deposited throughout the diked area should be sampled and analyzed for lead and
cadmium. If hazardous constituents are found, the waste should be removed down to
the bare concrete surfaces. The surfaces should then be tested again to ensure that
cleanup efforts have been successful.

SWMU #15. Container Storage Area (Photo #15)

Description

This unit is located along the southwestern wall of Building 36 and is currently in use. It is covered above and open on three sides.

Wastes Managed

According to facility personnel, only non-hazardous waste oil is stored at the unit. Up to 100 drums, containing various amounts of oil, are present at any one time. The oils are collected by First Recovery Co. for recycling.

Releases

The unit's base is a concrete slab. Any releases of liquid wastes which might leak from a drum would flow into the MSD system. No staining, odors, or evidence of releases were noted during the VSI. According to file information and facility personnel, there have been no releases from this unit.

Recommendation

No further action.